

In the Claims

Claims 17-25 have been canceled (without prejudice).

Claims 1, 3, 9 and 11 have been amended and Claims 28-29 have been added as follows:

1. (Currently Amended) A lens array, comprising:
a photosensitive glass plate having a silicate glass composition with at least the following elements:
 SiO_2 (65-85wt%)
 Li_2O (8-11wt%)
 Al_2O_3 (2-7wt%)
 CeO_2 (0.01-0.05wt%) and including a photosensitive agent comprising:
 Ag (0.0005-0.005wt%)

wherein when the photosensitive glass plate is subjected to an exposure step, [[a]] an approximately 615°C heat treatment step and a prolonged ion exchange step it becomes a glass composite plate that includes a plurality of glass regions which are lenses and at least one opal region located around the lenses.

2. (Previously Presented) The lens array of Claim 1, wherein said glass composite plate has substantially clear, colorless lenses.

3. (Currently Amended) The lens array of Claim 1, wherein said glass composite plate has lenses formed therein which have sag heights that are 46.2 μm - 187 μm greater than 65 μm .

Claims 4-6 (Canceled)

7. (Original) The lens array of Claim 1, wherein said prolonged ion exchange step is used to increase the sag height of the lenses by immersing the glass composite plate into a KNO_3 molten salt bath at 500°C for times on the order of 64 hours.

8. (Previously Presented) The lens array of Claim 1, wherein said silicate glass composition of said photosensitive glass plate also has the following elements:

Na_2O (0-10wt%)
 K_2O (0-8wt%)
 ZnO (0-5wt%)

Sb2O3 (0-5wt%); and
KnO3 (0-5wt%).

9. (Currently Amended) A method for making a lens array, said method comprising the steps of:

placing a photomask over a non-exposed photosensitive glass plate having a silicate glass composition with at least the following elements:

SiO2 (65-85wt%)
Li2O (8-11wt%)
Al2O3 (2-7wt%)
CeO2 (0.01-0.05wt%)

and including an amount of a photosensitive agent comprising:

Ag (0.0005-0.005wt%);

exposing the photomask and selected regions in the non-exposed photosensitive glass plate to an ultraviolet light;

heating the exposed photosensitive glass plate to about 615°C to form therein a plurality of glass regions and at least one opal region; and

ion exchanging the heated photosensitive glass plate to create said lens array, wherein said lens array is a glass composite plate where the plurality of glass regions are lenses and the at least one opal region is located around the lenses.

10. (Previously Presented) The method of Claim 9, wherein said lens array has substantially clear, colorless lenses.

11. (Currently Amended) The method of Claim 9, wherein said lens array has lenses formed therein which have sag heights that are 46.2µm - 187µm greater than 65µm.

Claims 12-14 (Canceled)

15. (Original) The method of Claim 9, wherein said ion exchange step is used to increase the sag height of the lenses by immersing the glass composite plate into a KNO3 molten salt bath at 500°C for times on the order of 64 hours.

16. (Previously Presented) The method of Claim 9, wherein said silicate glass composition of said photosensitive glass plate also has the following elements:

Na₂O (0-10wt%)
K₂O (0-8wt%)
ZnO (0-5wt%)
Sb₂O₃ (0-5wt%); and
KnO₃ (0-5wt%).

Claims 17-25 (Canceled)

26. (Previously Presented) The lens array of Claim 1, wherein said photosensitive agent is comprised of a combination of said Ag (0.0005-0.005wt%) and Au (0.005-0.015wt%).

27. (Previously Presented) The method of Claim 9, wherein said photosensitive agent is comprised of a combination of said Ag (0.0005-0.005wt%) and Au (0.005-0.015wt%).

28. (New) A lens array, comprising:

a photosensitive glass plate having a silicate glass composition with at least the following elements:

SiO₂ (65-85wt%)
Li₂O (8-11wt%)
Al₂O₃ (2-7wt%)
CeO₂ (0.01-0.05wt%) and including a photosensitive agent comprising:
Au (0.005-0.015wt%)

wherein when the photosensitive glass plate is subjected to an exposure step, an approximately 615°C heat treatment step and a prolonged ion exchange step it becomes a glass composite plate that includes a plurality of glass regions which are lenses and at least one opal region located around the lenses.

29. (New) A method for making a lens array, said method comprising the steps of:
placing a photomask over a non-exposed photosensitive glass plate having a silicate glass composition with at least the following elements:

SiO₂ (65-85wt%)
Li₂O (8-11wt%)
Al₂O₃ (2-7wt%)

CeO₂(0.01-0.05wt%)

and including an amount of a photosensitive agent comprising:

Au (0.005-0.015wt%);

exposing the photomask and selected regions in the non-exposed photosensitive glass plate to an ultraviolet light;

heating the exposed photosensitive glass plate to about 615°C to form therein a plurality of glass regions and at least one opal region; and

ion exchanging the heated photosensitive glass plate to create said lens array, wherein said lens array is a glass composite plate where the plurality of glass regions are lenses and the at least one opal region is located around the lenses.